



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/713,237

11/13/2003

Hormuzd M. Khosravi

5038-335

1182

32231

7590

02/03/2009

MARGER JOHNSON & MCCOLLOM, P.C. - Intel
210 SW MORRISON STREET, SUITE 400
PORTLAND, OR 97204

EXAMINER

BENGZON, GREG C

ART UNIT

PAPER NUMBER

2444

MAIL DATE

DELIVERY MODE

02/03/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Response to Arguments

Applicant's arguments filed 12/26/2008 have been fully considered but they are not persuasive.

The Examiner hereby withdraws the objection to the Specifications with respect to Claims 22-24.

The Examiner maintains the USC 112 rejection regarding Claim 8 as the claim amendments do not overcome the shortcomings cited in the rejection.

The Examiner notes that said Network Processing Forum is ill-defined as written in both the claim language and in the Applicant Specifications. The Network Processing Forum and its standards is a dynamic entity subject to future modifications. Thus the claims are intending to cover all future standards and modifications by said entity.

The Examiner maintains the USC 112 rejection regarding Claims 15,19,22. The Examiner believes the Applicant has misinterpreted the reasoning behind the rejection. The module performing the '*portion of functionality*' is the worker plane module, as stated by the Applicant. However the claims fail to distinguish what control functions are being claimed in the limitation described by the '*portion of functionality*'.

Art Unit: 2444

The e1 respectfully requests the a1 to cite support in the a1 Specifications for said *portion of functionality*.

The Examiner maintains the USC 101 rejection regarding Claims 7-15.

The Applicant presents the control plane, forwarding plane and modules are being embodied in a physical network element.

It is noted that the features upon which applicant relies (i.e., *physical network element*) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.

There is nothing in the claim language to suggest that the control plane, forwarding plane and modules are comprised of (or a part of) a physical network element.

The Applicant equates an article of computer-readable instructions to a machine readable code and provides support in Applicant Specifications Page 10. The Examiner maintains that a person of ordinary skill in the networking art would interpret an *article* as a product of manufacture, said product being described in a manner to fit the classification of statutory subject matter. There is no support in the Specifications for a product of manufacture that embodies said machine-readable code.

Since machine-readable code in itself is non-statutory subject matter, the Examiner maintains that said machine-readable code cannot properly construed as a product of manufacture.

The Applicant presents the following argument(s) *[in italics]*:

... Everdell's master SRM and local resilient manager LRM perform the same functions but with different level of abstractions, not different functions as recited in claim 1, namely "the core functionality of the control plane protocol module and the portion of the control plane protocol module that is separated from the core functionality." With respect to Everdell's MCD, neither the relevant paragraphs cited by the Examiner nor elsewhere does Everdell mention or imply that Everdell's MCD implements "a core functionality of the control plane protocol module," while offloading the portion separated from the core functionality to the slave and/or local resilient manager.

The Examiner respectfully disagrees with the Applicant. The Examiner notes that while there is a possibility of overlapping functionality between the master SRM and LRM, it would have been obvious to a person of ordinary skill in the networking art that given the management hierarchy the two entities are not performing the exactly same functions, such that the master SRM is offloading some functionality to the LRM.

However in an effort to expedite prosecution the Examiner presents prior art by Crump which presents control and forwarding planes, wherein *the control plane is split into box management control functions and routing control functions.*

The Applicant presents the following argument(s) *[in italics]*:

Crump teaches a forwarding plane implementing only the forwarding functions, and a separate control plane implementing all of the control plane functions... Crump does not teach a forwarding plan implementing a portion of the control plane functions.

The Examiner respectfully disagrees with the Applicant. Crump Figure 2 disclosed two separate and distinct portions of the control plane being implemented together (Routing and Forwarding) said portions thus regarded as core functionality of the control plane. Furthermore Crump Figures 5-6 disclosed wherein said portions are now implemented separately. Thus Everdell-Crump disclosed *a forwarding plane implementing a portion of the control plane functions.*

The Applicant argument appears to be implying that the claimed invention forwarding plane is actually implementing a shared functionality. The Examiner respectfully request further clarification as this argument is contradictory to what the claim language indicates.

The Applicant presents the following argument(s) *[in italics]*:

... The Supreme Court in KSR noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit.. The rationale provided by the OA at

Art Unit: 2444

pages 6-12 for supporting the conclusion of obviousness for claims 7-15 and 19-24 appears most closely akin to the KSR rationale of combining prior art elements according to known methods to yield predictable results.

Everdell and Crump are analogous art because they present concepts and practices regarding the separation of network management control functions. At the time of the invention it would have been obvious to a person of ordinary skill in the networking art to combine Crump into Everdell. The motivation for said combination would have been to improve router scalability with respect to the control plane. (Crump-Column 6 Lines 35-40)

Furthermore the Examiner notes that while there is a possibility of overlapping functionality between the master SRM and LRM, it would have been obvious to a person of ordinary skill in the networking art that given the management hierarchy the two entities are not performing the exactly same functions, such that the master SRM is offloading some functionality to the LRM. A person of ordinary skill in the networking art would have been motivated to implement a hierarchical control plane with distributed functionality such that the master SRM is offloading some functionality to the LRM in order to avoid bottleneck conditions at the higher control nodes.

The Applicant presents the following argument(s) *[in italics]*:

Crump may teach that the control plane is split into separate functions, but it still does not teach implementing a portion of the control plane protocol module that is

Art Unit: 2444

separate and distinct from the core functionality on at least one forwarding plane...

[Crump is] clearly implying that the router 600 does not implement anything on the forwarding plane. Crump cannot teach implementing control plane functions on the forwarding plane if the router 600 supports a distributed control plane that runs independently of the forwarding plane.

The Examiner respectfully disagrees with the Applicant. The Applicant assertion that *the router 600 does not implement anything on the forwarding plane* is incorrect.

The Examiner notes that 'independently of the forwarding plane' does not mean 'exclusive of the forwarding plane.' Crump clearly indicates that the forwarding plane is necessary in order for said distributed control plane to perform the necessary management and routing functions. Furthermore since the routing control was previously considered a portion of the control plane (Crump-Column 3 Lines 30-40) but is now separated and implemented on the forwarding plane (Crump- Column 6 Lines 25-45) then Everdell-Crump disclosed *implementing a portion of the control plane protocol module that is separate and distinct from the core functionality on at least one forwarding plane.*

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant.

Art Unit: 2444

Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREG BENGZON whose telephone number is (571)272-3944. The examiner can normally be reached on Mon. thru Fri. 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on (571)272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2444

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Paul H Kang/
Primary Examiner, Art Unit 2444

/G. B./
Examiner, Art Unit 2444